

Title (en)

OLT, ONU AND PON SYSTEM AND INFORMATION TRANSMISSION METHOD IN PON SYSTEM

Title (de)

OLT-, ONU- UND PON-SYSTEM UND INFORMATIONSSÜBERTRAGUNGSVERFAHREN IN EINEM PON-SYSTEM

Title (fr)

SYSTÈME OLT, ONU ET PON ET PROCÉDÉ DE TRANSMISSION D'INFORMATIONS DANS UN SYSTÈME PON

Publication

**EP 4258682 A3 20240110 (EN)**

Application

**EP 23179105 A 20181011**

Priority

- CN 201810078953 A 20180126
- EP 18902400 A 20181011
- CN 2018109898 W 20181011

Abstract (en)

This application provides an OLT, an ONU, a PON system, and an information transmission method in a PON system. The method includes: sending, by an OLT, first information to an unregistered ONU, where the first information includes at least one piece of indication information, and one piece of indication information indicates a first power range and a first time range associated with the first power range; and receiving, by the OLT in the first time range, a registration message sent by the ONU, where a downstream receive power of the ONU falls within the first power range. Registration signals of ONUs whose downstream receive powers fall within a same power range are similar or differ little in signal strength when reaching the OLT, so that the OLT can quickly respond to a registration signal of an ONU, and an overall response time of the OLT for registration signals of different ONUs can be shortened.

IPC 8 full level

**H04B 10/69** (2013.01); **H04B 10/272** (2013.01); **H04J 3/06** (2006.01); **H04Q 11/00** (2006.01)

CPC (source: CN EP KR US)

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**H04L 5/0053** (2013.01 - CN KR); **H04Q 11/00** (2013.01 - EP); **H04Q 11/0062** (2013.01 - CN); **H04Q 11/0067** (2013.01 - EP KR US);  
**H04J 3/0682** (2013.01 - EP); **H04Q 2011/0064** (2013.01 - EP); **H04Q 2011/0088** (2013.01 - US)

Citation (search report)

- [A] US 2015365172 A1 20151217 - LUO YUANQIU [US], et al
- [A] US 2009208227 A1 20090820 - YOSHIDA SETSUO [JP], et al

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**EP 3737006 A1 20201111; EP 3737006 A4 20210303; EP 3737006 B1 20230726; EP 3737006 C0 20230726;** AR 114317 A1 20200819;  
CN 110086545 A 20190802; CN 110086545 B 20210622; CN 113472450 A 20211001; EP 4258682 A2 20231011; EP 4258682 A3 20240110;  
ES 2959401 T3 20240226; JP 2021511759 A 20210506; JP 2022137102 A 20220921; JP 7096364 B2 20220705; JP 7444925 B2 20240306;  
KR 102458349 B1 20221021; KR 102617260 B1 20231221; KR 20200111214 A 20200928; KR 20220148312 A 20221104;  
TW 201933806 A 20190816; TW I693802 B 20200511; US 11368223 B2 20220621; US 11646796 B2 20230509; US 2020350992 A1 20201105;  
US 2022255624 A1 20220811; WO 2019144650 A1 20190801

DOCDB simple family (application)

**EP 18902400 A 20181011;** AR P190100179 A 20190125; CN 201810078953 A 20180126; CN 2018109898 W 20181011;  
CN 202110697888 A 20180126; EP 23179105 A 20181011; ES 18902400 T 20181011; JP 2020560525 A 20181011;  
JP 2022100791 A 20220623; KR 20207023998 A 20181011; KR 20227036493 A 20181011; TW 108102541 A 20190123;  
US 202016936212 A 20200722; US 202217725373 A 20220420